

SYNONYMICAL NOTES ON THE
LEPISMATIDAE (THYSANURA)

P. WYGODZINSKY

*University of California, Berkeley*¹

The following notes are intended to elucidate some synonymical problems in the Lepismatidae and make it possible for correct combinations to be used for work now in progress.

HETEROLEPISMA Escherich

Isolepisma Escherich, 1905, *Zoologica* (Stuttgart) 43:61.*Heterolepisma* Escherich, 1905, *Zoologica* (Stuttgart) 43:63.*Heterolepisma* Stach, 1933, *Prace Muz. zool.* 9:341.*Notolepisma* Tillyard, 1924, *New Zealand J. Sc. Techn.* 7:241. *New synonymy.*

The International Code of Zoological Nomenclature adopted by the fifteenth International Congress of Zoology, London, 1958, determines that the relative priority of different names for a single taxon published simultaneously is determined by the action of the first reviser. In the present case, Stach (1933) unequivocally selected *Heterolepisma* as the name to be used for the genus composed of Escherich's now synonymized *Heterolepisma* and *Isolepisma*, stating "so wähle ich den ersten Namen als einen gemeinsamen Gattungsnamen für alle diese Arten." This selection of *Heterolepisma* as the correct name for the genus must be accepted.

The description of *Notolepisma* Tillyard is very short and, as now has become apparent, not completely correct; up to the present moment it had not been possible to place this genus in the system of the Lepismatidae. Its situation as a supposedly endemic New Zealand genus made it especially desirable to obtain additional data and settle its taxonomic status.

Thanks to the kindness of Miss Margaret Williams, of the Zoology Department, University of Canterbury, Christchurch, New Zealand, I have been able to examine specimens of a lepismatid collected at the type locality of *Notolepisma zelandica*, viz. York Bay, Wellington Harbour, North Island, as well as additional specimens from the South Island.

The York Bay specimens agree closely enough with Tillyard's description to make it certain that the same species is involved.² Examination of the material leaves no doubt that *Notolepisma*

¹Work carried out while on leave of absence from the Department of Zoology, University of Buenos Aires, under a John Simon Guggenheim Memorial Foundation fellowship.

²Miss Williams informs me that the type of *Notolepisma zelandica* is very poorly preserved, but that it does bear out the following conclusions.

zelandica Tillyard is a species of the genus *Heterolepisma* Eschrich; hence *Notolepisma* must be considered as a synonym of *Heterolepisma*, and the New Zealand species must be listed as *Heterolepisma zelandica* (Tillyard). Tillyard (1924) mentions stylets to be present on abdominal segments I-IX; this is almost certainly an error, as York Bay specimens (females only) possess four pairs of stylets only. South Island specimens agree well with those from York Bay, as to structure and chaetotaxy, but there are only two pairs of stylets in both sexes. *Isolepisma howensis* (Womersley, 1942) from Lord Howe Island, also agrees closely with *zelandica*, but the females possess three and the males two pairs of stylets. It is very probable that *howensis* is just another population of *zelandica*, though until additional evidence becomes available the synonymy is not established.

ALLACROTELSA Silvestri

Lampropholis Menge, in Koch and Berendt, 1854, Organische Reste im Bernstein, 1(2):117 (preoccupied by *Lampropholis* Fitzinger, 1843, Systema Reptilium :22).

Allacrotelsa Silvestri, 1934, Bull. Bernice P. Bishop Mus. 114:307.

Stachisma Wygodzinsky, 1942, Rev. Brasil. Biol. 2(1):42. *New synonymy*.

A comparison of the redescription of the Baltic amber *Lampropholis dubia* (Koch and Berendt, 1854) given by Silvestri (1912), with specimens of recent species shows the generic identity of *Lampropholis* Menge, *Allacrotelsa* Silvestri and *Stachisma* Wygodzinsky. *Lampropholis* Menge is preoccupied by *Lampropholis* Fitzinger; the next available name, *Allacrotelsa* Silvestri, must thus be used as the correct one for the genus, now including Recent and Fossil species.

Allacrotelsa is characterized among the Lepismatidae with smooth macrochaetae not only by details of its chaetotaxy, but also by the slender terminal segment of the labial palp, the pseudo-segmented parameres of the male, and the elongate tenth tergite.

The following Recent and Fossil species included in *Allacrotelsa* form a closely knit group and differ morphologically only by minor characters.

ALLACROTELSA DUBIA (Koch and Berendt) new combination

Lepisma dubia Koch and Berendt, 1854, Organische Reste im Bernstein 1(2):116.

Lampropholis dubia: Silvestri, 1913, Schrift. phys.-ök. Ges. Königsberg 53:47 (with complete synonymy).

The species is known only from the Baltic amber. Jeannel

(1960) states that "Lapropholis (sic) dubia K. & B . . . still exists . . ."; it has not been possible to ascertain the source of this statement.

ALLACROTELSA SPINULATA (Packard)

Lepisma spinulata Packard, 1873, Fifth Ann. Rep. Peabody Ac. Sc.: 48.

Acrotelsa spinulata: Escherich, 1905, Zoologica (Stuttgart) 43:112.

Acrotelsa spinulata: Silvestri, 1948, Boll. Lab. Entom. Agr. Portici 8:100 (redescription).

Allacrotelsa spinata (sic) F: Silvestri, 1934, Bull. Bernice P. Bishop Mus. 114; 307.

Stachisma mexicana Wygodzinsky, 1949, Act. Zool. Lill. 6:224. *New synonymy*.

This species is widely distributed over at least the Western and Southwestern United States, and is found also in Baja California. Its considerable ecological range is remarkable; it is equally well at home in the mesophytic forests of the California coast ranges and the semi-arid regions of Southern California and Arizona, though it does not seem to occur under conditions of extreme aridity. Specimens can be collected in loose soil, in leaf litter, under and between rocks, in rotten wood or under the bark of fallen or standing trees; it is to be supposed that the latter habit was shared by *A. dubia* as this would easily explain the relative frequency of that species in the Baltic amber.

A. spinulata differs from *A. dubia* by the somewhat more pointed tenth tergite, the longer inner processes of the coxopodite IX in the female, the larger number of macrochaetae in the median bristle-combs of the urosternites, and the presence of 3 + 3 bristle-combs on urotergite VIII (2 + 2 in *dubia*). The peculiar trichobothrium situated subbasally on the dorsal surface of the hind tibia as described for *dubia*, is equally found in *spinulata* (though not mentioned or shown in Silvestri's [1948] redescription of the latter). As in *A. kraepelini*, the length of the ovipositor in *spinulata* is somewhat variable; there is no correlation between body size and length of ovipositor.

ALLACROTELSA KRAEPELINI (Escherich)

Ctenolepisma kraepelini Escherich, 1905, Zoologica (Stuttgart) 18:90.

Isolepisma kraepelini: Silvestri, 1923, Trans. R. Ent. Soc. London: 259.

Stachisma kraepelini: Wygodzinsky, 1942, Rev. Brasil. Biol. 2(1):42.

Allacrotelsa kraepelini: Wygodzinsky, 1952, Acta Ent. Mus. Nat. Pragae 26:8.

This species is found in the mediterranean region, as far east as Turkey and Mesopotamia; it is apparently quite frequent.

The differences between *A. kraepelini* and *A. spinulata* have

been indicated by Wygodzinsky (1949). *A. kraepelini* agrees with *dubia* by the number of bristle-combs on the eighth urotergite, but seems to differ by the presence of a median bristle-comb on urosternite VIII of the male, and the number of macrochaetae in this and the remaining median ventral bristle-combs. Difference in total size (*kraepelini* 14, *dubia* 9 mm) may be partly responsible for differences in the above and other meristic characters.

LITERATURE CITED

JEANNEL, R.

1960. Introduction to Entomology. Hutchinson & Co., London, 344 pp.

SILVESTRI, F.

1912. Die Thysanuren des baltischen Bernsteins. Schr. phys.-ök. Ges. Königsberg, 53:42-66.

1948. Descrizione de una specie nota e di una nuova di Lepismatidae (Insecta, Thysanura). Boll. Lab. Ent. Agr. Portici, 8:102-108.

STACH, J.

1933. Heterolepisma horni n. sp. und die Zusammenstellung der Arten der Gattung Heterolepisma (Thysanura). Prace Mus. zool. 9:341-349.

TILLYARD, R. J.

1924. Primitive wingless insects. I. The silverfish, bristletails and their allies (Order Thysanura). New Zealand J. Sc. Techn., 7:232-224.

WYCODZINSKY, P.

1949. Contribucion al conocimiento de las Lepismatinae americanas (Lepismatidae, Thysanura). Acta Zool. Lilloana, 6:215-227.

A NEW GENUS AND SPECIES OF EUAESTHETINAE FROM CHILE

(Coleoptera: Staphylinidae)

DAVID H. KISTNER

Chico State College, California

The purpose of this paper is to describe a new genus and species of Euaesthetinae from Chile, to show some of its relationships to the rest of the subfamily, and to point out some of its primitive features.¹

I wish to express my thanks to Mr. L. Peña of Santiago, Chile, who supplied the material and to Mr. Robert Banfill of Columbus, Montana, for technical assistance.

¹This paper is part of a more general study of the Euaesthetinae which has been supported in large part by the National Science Foundation (Grant No. G-6126).